City of Johnson City, Tennessee

Stormwater Management Utility
Adjustment and Credit Manual

June 2007

ADJUSTMENT AND CREDIT MANUAL
JOHNSON CITY, TENNESSEE

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Section 1 - Introduction

Johnson City established a Stormwater Management Utility on January 18, 2007. The utility provides the City with the authorization to establish and collect just and equitable rates, fees, and charges for the services and facilities provided by the utility system. The City is further authorized by the Tennessee Statutes to construct, reconstruct, improve, and extend the Stormwater Management system.

The City's Stormwater Management Utility establishes a mechanism for billing the costs of operating and maintaining the City's stormwater management system, and financing the necessary repairs, replacements, improvements, and extensions. The City's ordinance provides the mechanisms for billing and payment, accounting for capital contributions, and establishing the Stormwater Utility Fund. This Adjustment and Credit Manual outlines the guidelines under which the City will grant adjustments and credits to stormwater user fees.

1.1 Definitions

The following definitions shall apply in the use of this Adjustment and Credit Manual. Words used in the singular shall include the plural, and the plural, the singular; words used in the present tense shall include the future tense. The word "shall" is mandatory and not discretionary. The word "may" is permissive. Words not defined herein shall be construed to have the meaning given by common and ordinary use as defined in the latest edition of Webster's Dictionary.

ACCELERATED WATER EROSION. The wearing away of the land surface by stormwater runoff, or snow melt water, occurring at a much more rapid rate than geologic or normal erosion, primarily as a result of denuding the land and/or altering its slope.

ADJUSTMENT. The adjustment of the user fee assessed to a particular parcel based on the more detailed assessment of the impervious area on that parcel.

AGRICULTURAL LANDS. Those lands utilized for any agricultural use, including forestry.

APPEAL. The process of filing a dispute with the fee determination, fee adjustment or fee credit as recognized by the City.

APPLICANT. Any person, or a duly designated representative applying for a permit or other type of city, federal, or state regulatory approval to proceed with a project.

APPROVING AGENCY. The approving agency shall be the Stormwater Management Utility designated by and representing Johnson City.

AQUIFER. An underground formation, group of formations, or part of a formation that is permeable enough to transmit, store, or yield usable quantities of water.

AS-BUILT PLANS. The final plans amended to include all locations, dimensions, elevations, capacities, features and capabilities, as actually constructed and installed.

BEST MANAGEMENT PRACTICES (BMP), Manual for Stormwater Best Management Practices, Current Edition. City manual defining acceptable programs, technologies, processes, site layout techniques and criteria, operating methods, measures, or devices that control, prevent, remove, or reduce pollution.

CHANNEL. A natural stream that conveys water. A ditch, or passageway, excavated to permit or accommodate the flow of water.

CITY. Johnson City, Tennessee and its authorized agents.

CITY ENGINEER. A professional engineer designated by and representing Johnson City, Tennessee or such engineer's authorized designee.

CLEARING. The removal of trees, brush, and other ground cover from all or a part of a tract of land, but shall not include mowing.

COMMERCIAL RATE DETERMINATION. See nonresidential rate determination.

COMMISSION. The City Commission of Johnson City, Tennessee.

COMPENSATING STORAGE. Equivalent floodplain storage provided to counterbalance floodplain filling.

CONCENTRATED STORM RUNOFF. Surface runoff that converges and flows primarily through water conveyance features such as swales, gullies, waterways, channels, or storm sewers and which exceeds the maximum specified flow rates of filters or perimeter controls intended to produce or control sheet flow.

COUNTY. Washington, Sullivan, Carter, and/or Unicoi

CUSTOMER. The owner of any parcel that is receiving a stormwater utility fee from Johnson City, Tennessee.

DETENTION or TO DETAIN. The prevention of, or to prevent, the discharge, directly or indirectly, of a given volume of stormwater runoff into surface waters by providing temporary on-site storage.

DEVELOPMENT or DEVELOPMENT ACTIVITY. The alteration, construction, installation, demolition or removal of a structure, impervious surface, pipe, conduit, cable or line, above or below ground, or the clearing, scraping, grubbing, killing or otherwise removing the vegetation from a site; or adding, removing, exposing, excavating, leveling, grading, digging, burrowing, dumping, piling, dredging or otherwise significantly disturbing the soil, mud, sand or rock of a site.

DIRECTLY CONNECTED IMPERVIOUS AREAS. Those impervious areas which are directly connected to the City's drainage system by a ditch, storm sewer, channel, or other man-made device for the conveyance of stormwater runoff.

DISCHARGE. The flow of water from a project, site, aquifer, drainage basin, or other drainage facility.

DITCH. An artificial waterway for the purpose of irrigation or for stormwater conveyance.

DRAINAGE FACILITY. Any component of a stormwater management system.

DRAINAGE SYSTEM. All facilities or natural drainage used for the movement of stormwater through and from a drainage area including, but not limited to, any and all of the following:

- conduits, pipes and culverts, including appurtenant features such as catch basins, inlets, manholes, and headwalls,
- channels, ditches, flumes, curbs, streets and other paved areas,
- natural drainage conveyance (maintained or not), including fields, woodlands and sinkholes, and
- all watercourses, standing or flowing bodies of water, and wetlands.

While some such facilities may be isolated in a given storm event, all are interconnected in a given drainage system for a storm event exceeding a certain magnitude.

DWELLING UNIT. Any building or portion thereof designed or used exclusively as the residence or sleeping place of one family, but not including a tent, cabin, trailer or trailer coach, boarding or rooming house, hotel, or mobile home.

EASEMENT. A grant by a property owner for a specified use of all or a specified portion of land to a person or the public at large.

EROSION. The wearing or washing away of soil by the action of water.

FACILITIES. Various drainage works that may include but are not limited to inlets, conduits, manholes, energy dissipation structures, channels, outlets, retention/detention basins, and other structural components.

FEMA. Federal Emergency Management Agency.

FOREBAYS. Areas with hardened bottoms, located at detention basin inlets that are designed to trap coarse sediment particles by separating approximately ten percent of the basin volume from the remainder of the basin with a lateral sill, rock-filled gabions, a retaining wall, or horizontal rock filters.

FREEBOARD. The space from the top of an embankment to the highest water elevation expected for the largest design storm stored. The space is often required as a safety margin in a pond or detention basin.

FREQUENCY YEAR STORM. A rainfall event expressed as an exceedence probability with a specified chance of being equaled or exceeded in any given year, as follows:

One (1) Year.....	100 percent
Two (2) Year.....	50 percent
Ten (10) Year.....	10 percent
Twenty-Five (25) Year.....	4 percent
Fifty (50) Year.....	2 percent
One-Hundred (100) Year.....	1 percent

GROUNDWATER. Water below the surface of the ground, in known or defined natural channels, whether flowing or not.

HYDROGRAPH. A graph of inflow and/or discharge versus time for a selected point in the drainage system.

IMPERVIOUS SURFACE. A surface which has been compacted or covered with a layer of material so that it is resistant to infiltration by water, including semi-pervious surfaces such as compacted clay, most conventionally surfaced streets, roofs, sidewalks, parking lots, and other similar surfaces.

INSPECTOR. A person designated by the Stormwater Utility Manager who conducts the necessary inspection of stormwater related work to ensure conformance with the Approved Plan and the provisions of this chapter.

INTENSITY. The depth of accumulated rainfall per unit of time.

MULTI-FAMILY, A developed property with more than one unit (e.g. Apartments, Townhouses, Condos, Duplexes, etc.)

MAINTENANCE. The action taken to protect, preserve, or restore the as-built, functionality of any facility or system.

NONRESIDENTIAL DEVELOPED PROPERTY. A developed property that is not utilized for dwelling units.

NONRESIDENTIAL RATE DETERMINATION. Measured in equivalent SFU units. The equivalent SFU is determined by measuring the impervious area and dividing it by the average SFU area (3,315 sq. ft).
Example: A business with 33,150 sq. ft. of impervious surface would pay the following :
33,150 sq. ft. / 3315 sq. ft. = 10 SFUs x $3.00 = $30.00 per month

NOTICE. A written or printed communication conveying information or warning.

OPEN CHANNEL. An uncovered ditch, channel, or swale used to convey stormwater runoff.

OWNER. The person in whom the fee, ownership, dominion, or title of property (i.e., the proprietor) is vested. This term may also include a tenant, if chargeable under his lease for the maintenance of the property, and any agent of the owner or tenant including a developer.

PARCEL or PARCEL OF LAND. A tract, or contiguous tracts, of land in the possession of, owned by, or recorded as property of the same claimant person as of the effective date of the Stormwater Regulations.

PEAK RATE OF FLOW. The maximum rate of discharge resulting from a given storm event.

PERMITTEE. Any person who has been granted a permit to proceed with a project.

PERSON. Any individual, firm, corporation, governmental agency, business trust, estate, trust, partnership, association, two or more persons having a joint or common business interest, or any other legal entity.

POA (PROPERTY OWNER'S ASSOCIATION). The legally recognized, non-profit group or organization representing the interest of the property owners within a specified jurisdiction or as defined by City regulations.

POSITIVE OUTLET. A gravity discharge from a basin via overland flow, artificial waterway, natural waterway, or pipe.

POST-DEVELOPMENT. The hydrologic and hydraulic condition of a project site immediately following completion of the development for which a permit has been approved.

PRE-DEVELOPMENT. The hydrologic and hydraulic condition of a project site immediately before development or construction begins.

PRIVATE. Property or facilities owned by individuals, firms, entities, corporations, and other organizations and not by local, state or federal governments.

PROFESSIONAL ENGINEER. A professional engineer licensed by the State of Tennessee, skilled in the practice of civil engineering and the engineer of record for the project under consideration.

PUBLIC. Property or facilities owned by local, state or federal governments.

RAINFALL INTENSITY. The depth of accumulated rainfall per unit of time.

RATE. Volume of water, or other material, per unit of time.

RECEIVING WATERS or WATER BODY. Any water body, watercourse, or wetland into which surface water flows.

RESIDENTIAL RATE DETERMINATION.

Small Single Family –	(< 1,691 sq-ft)	0.51 SFU
Average Single Family -	(1,692 sq-ft thru 5,574 sq-ft)	1.00 SFU
Large Single Family -	(> 5,575 sq-ft)	1.68 SFUs
Multi-Family		0.71 SFU/Unit

RETENTION or TO RETAIN. The prevention of, or to prevent, the discharge, directly or indirectly, of a given volume of stormwater runoff into surface waters by complete on-site storage.

SEDIMENT. Solid material, whether mineral or organic, that is in suspension, is being transported, or has been moved from its place of origin by water.

SEDIMENT CONTROL DEVICE. Any structure or area that is designed to hold runoff water until suspended sediment has settled out.

SINGLE FAMILY DETACHED UNIT (SFU). The statistical average estimated to be 3,315 square feet of horizontal impervious area for each single family detached residential dwelling unit within the City and as established by Ordinance. The horizontal impervious area includes, but is not limited to, all areas covered by structures, roof extensions, patios, porches, driveways, compacted gravel and sidewalks.

SITE. Any tract, lot, or parcel of land or contiguous combination of tracts, lots, or parcels of land that is in one ownership, or contiguous and in diverse ownership, where development is to be performed as part of a unit, subdivision, or project.

SITE STORMWATER MANAGEMENT PLAN. Refers to the approved, detailed analysis, design, and drawings of the stormwater management system required for all construction.

STORM EVENT. A storm of a specific duration, intensity, and frequency.

STORMWATER OR RUNOFF. Refers to the flow of water which results from, and which occurs during and following a rainfall event.

STORMWATER DESIGN STANDARDS. The design standards presented in the Stormwater Regulations, and such other standards that may be adopted by the City from time to time.

STORMWATER MANAGEMENT SYSTEM OR FACILITIES. Refers to the existing, designed, and/or constructed features which collect, convey, channel, store, inhibit, or divert the movement of stormwater.

STORMWATER MANAGEMENT PLAN. The technical and policy manuals, plans, regulations and/or calculations, and any subsequent updates or amendments thereto, used by the City Engineer to administer the stormwater regulations.

STORMWATER UTILITY MANAGER. Person responsible for daily operations of the Johnson City Stormwater Management Utility and reporting to the Public Works Director.

STRUCTURE. Anything constructed or installed with a fixed location on or in the ground.

SUBGRADE. The top elevation of graded and compacted earth underlying roadway pavement.

SWALE. An artificial or natural waterway which may contain contiguous areas of standing or flowing water following a rainfall event. A swale may be planted with or otherwise contain vegetation suitable for soil stabilization, stormwater re-treatment, and/or nutrient uptake; or may be designed to accommodate or account for soil erodibility, soil percolation, slope, slope length, and contributing area, so as to prevent erosion and reduce the pollutant concentration of any discharge.

TENNESSEE STORMWATER MANAGEMENT AND SEDIMENT CONTROL HANDBOOK. This handbook includes all existing Tennessee stormwater management regulations required for individuals to submit a stormwater management and sediment reduction permit application to the Department of Environmental Control (TDEC).

UTILITY. The stormwater management utility provided for in Ordinance No. 4226-06.

VACANT LAND. A lot or parcel of land that is without any building, structure or improvement, including impervious surfaces, but does not include recreation, green or open space created around private or public facilities nor parcels connected or contiguous thereto for the same or similar uses.

WATER BODY. Any natural or artificial pond, lake, reservoir, or other area that ordinarily or intermittently contains water, and which has a discernible shoreline.

WATERCOURSE. Any natural or artificial stream, creek, channel, ditch, canal, waterway, gully, ravine, or wash in which water flows either continuously or intermittently, and which has a definite channel, bed, or banks.

WATER QUALITY. Those characteristics of stormwater runoff from a land disturbing activity that relate to the physical, chemical, biological or radiological integrity of water.

WATER QUANTITY. Those characteristics of stormwater runoff that relate to the rate and volume of the stormwater runoff to downstream areas resulting from land disturbing activities.

WET DETENTION. A detention basin that contains a permanent pool of water that will retain runoff for a minimum period of 14 days for an average summer rainfall, and which has a littoral zone over a substantial portion of the pond surface area.

WETLAND. An area that is inundated or saturated by surface or groundwater with a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated

soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

WORKS. All artificial, man made structures, including, but not limited to, canals, ditches, swales, conduits, channels, culverts, pipes, and other construction that connects to, draws water from, drains water into, or is placed in or across the waters of the state.

WATERSHED. Drainage area contributing stormwater runoff to a single point.

Section 2 – User Fee Adjustment and Credits

The following procedures address both adjustments and credits for Stormwater user fees. The City grants user fee adjustments when customers identify incorrect information contained in the City's billing database. Adjustments typically occur when the City has incorrectly delineated the impervious area within a nonresidential property, or when residential customers are assigned the incorrect stormwater billing unit.

User Fee Credits are associated with the construction, operation, and maintenance of privately owned stormwater facilities or reservation of land that provide beneficial use to the City. Both residential and nonresidential customers can qualify for user fee adjustments; whereas only nonresidential customers, multi-family and private Property Owner's Associations (POAs) qualify for user fee credits. **Appendix A** contains Stormwater Management Utility Forms that are used as part of the submittal for either an adjustment or consideration for a credit.

The Director of Public Works, or his/her designee, will review adjustment and credit requests made during the first fiscal year that the stormwater user fee is imposed and when customers implement a change to their existing stormwater facility. These requests will be reviewed within a 6-month period from the date of filing of the request. Stormwater fee changes resulting from such requests shall be retroactive for the first year of the utility's fee structure and will not exceed one year; subsequent evaluations will allow fees to be reduced from the date of the application submittal and will not exceed 6 months.

2.1 User Fee Adjustments

Requests for adjustment of the stormwater user fee shall be submitted through the Stormwater Utility Manager's office, who has authority to administer the procedures and standards, and review criteria for the adjustment of fees as established herein. All requests shall be judged on the basis of the amount of impervious area on the site or on the basis of the residential classification and/or number of dwelling units.

The following procedures shall apply to all adjustment requests of the stormwater user fee:

- Any owner/customer who has paid stormwater user fees, and who believes the Single Family Unit (SFU) component of his/her stormwater user fee to be incorrect, may submit an adjustment request on the forms supplied herein. Stormwater Management Utility Form No. 1 is for residential SFU adjustments and Stormwater Management Utility Form No. 2 is for nonresidential SFU adjustments.

- The first step in the adjustment process will be a review of the City's calculation of the impervious area. If resolution is not achieved, the City may request the customer to provide supplemental information to the Stormwater Utility Manager including, but not limited to, survey data prepared

by a registered Professional Land Surveyor (P.L.S.) that represents the amount of impervious area and compacted gravel area on a parcel and/or engineering reports prepared by registered Professional Engineer (P.E.). Failure to provide such information may result in the denial of the adjustment request.

- The Stormwater Utility Manager shall respond in writing to all adjustment requests. The response shall provide an explanation of adjustment approval or denial as well as requests for additional information.

Adjustment denials may be appealed per the process as presented in Section 4.

2.1.1 Multi-Family Residential Adjustments

Any fully constructed multi-family residential property may apply for an adjustment in fee calculation. That fee adjustment shall be based on the same formula as nonresidential which is the total impervious area of the property divided by the SFU statistical average at the time of the request. No Credit will be applied to any multi-family that reduces the total fee to an amount less than one Single Family Unit.

The owner of said multi-family shall provide as-built survey data prepared by a registered Professional Land Surveyor (P.L.S.) that represents the amount of impervious area and compacted gravel area on a parcel and/or engineering reports prepared by registered Professional Engineer (P.E.). Failure to provide such information may result in the denial of the adjustment request.

2.1.2 Additional Stormwater Adjustments

In addition to the requirements presented above, adjustments may also be given when an owner meets any of the following requirements:

Owner demonstrates that the 100 year rainfall event does not generate runoff for a impervious area (has no outlet), is completely watertight, and has at least 18 inches of freeboard. This adjustment is for unusual structures, such as swimming pools, hazardous material storage areas, etc. For these specific cases, a customer's SFUs will be adjusted by removing from the SFU calculation the amount of impervious area that does not generate runoff.

- Owner demonstrates that on-site gravel is not compacted, not used for vehicular traffic, and not impervious. The City may grant adjustments for non-compacted gravel areas used for landscaping or other purposes. The City considers all compacted gravel areas (e.g. drives, storage areas, etc.) as impervious areas, and as such, no adjustment will be granted. The Director of Public Works or his/her designee will make the decision regarding the intended purpose of gravel areas and the degree of imperviousness.

2.2 User Fee Credits

Nonresidential customers and private property POAs may qualify for user fee credits when they can demonstrate that their existing or proposed stormwater facilities provide the City with a cost savings that the City otherwise would incur as part of their efforts to manage stormwater. The amount of reduction will be determined by the City on a case-by-case basis.

2.2.1 Restrictions

a. No public or private property shall receive Credit to offset Fees for any condition or activity unrelated to the City's cost of providing stormwater management services.
b. No Credit will be applied to any nonresidential parcel that reduces the Fee to an amount less than one Single Family Unit.
c. Credits will not apply to Stormwater Pollution Prevention Plan (SWPPP) Review and Inspection fees attributable to new development or redevelopment projects.
d. Any BMP or portion(s) of the stormwater management within a permanent storm drainage easement maintained by the government (municipality, city or state), shall not be eligible for a fee credit.
e. Credit shall only be given to the property owner of record.

2.2.2 Terms

a. Credits will only be applied if requirements outlined in this Manual are met, including, but not limited to: completion of on-going maintenance, guaranteed right-of-entry for inspections, and submittal of annual self-reports.
b. Credits will be defined as percent (%) reductions applied as a Credit adjustment to the Fee calculation equation.
c. Credits are additive for each Credit category described in Sections 2.2.3 – 2.2.7.
d. As long as the BMPs are functioning as approved (as demonstrated by self-certification reports and City inspections), the Credit reduction will be applied to the Fee. If the approved practice is not functioning as approved or is terminated, the Credit reduction will be cancelled and the Fee will return to the baseline calculation. Once the Credit reduction has been cancelled, a customer may not reapply for Credit for a period of 3 months and only then if the deficiency has been corrected, as determined by City inspection. (See Section 5 for more details).
e. Credits will be applied retroactively for the first year of the revised fee program, and from the date of application submittal after the first year.

2.2.3 Option 1. Integrated Non-Structural BMP Program Credit

Credits may be issued for a Site with ongoing implementation of an integrated suite of fundamental non-structural BMPs that will help the City meets its permit objectives. To receive a 10% Credit adjustment as applied to the Fee calculation equation, documentation must be provided to verify that all of the following BMPs that are applicable to the site and actual land use have been met:

BMP1:	Educational Program
BMP2:	On-Site Refuse Control Program
BMP3:	On-Site Stormwater System Maintenance and Cleaning Program
BMP4:	Paved Area Sweeping Program

BMP5: Used Motor Oil Recycling Program
BMP6: Sanitary Sewer/Storm Sewer Cross-Connection Inventory
BMP7: Landscaping for Run-Off Rate Control and Water Quality
BMP8: Storm Drain Stenciling Program
BMP9: Designated Vehicle Washing Area

Upon receipt of completed Stormwater Credit Application, application approval, and satisfactory on-site inspection to insure that all criteria are being met, the 10% credit will be applied. All requests will be reviewed on an individual basis with findings of the review transmitted back to the customer within six months of receipt of a completed application.

2.2.3.1 Educational Program

Nonresidential customers who wish to receive Fee Credit for educating employees in the area of water quality awareness and protection must agree to the following minimum standards:

a. Devote fifteen minutes per quarter (or an hour annually) to educating employees about water quality awareness and protection. Additionally, provide basic stormwater management information to new employees. Organizations will be required to submit programs or agendas to the City for environmental education sessions that will include information concerning number of attendees, time(s), place(s), and topic(s) covered during each session along with confirmation that a 50% employee participation goal was met. Pre- and post-session surveys are recommended. Topics must rotate on at least an annual basis.
b. Post stormwater and water quality-specific educational information obtained from the City, state/federal environmental agencies, or from any other reputable educational resource center in employee frequented areas. Information posted must be clearly visible. Information topics must rotate on at least an annual basis. Copies of posted materials must be provided to the City.
c. Distribute stormwater and water quality-specific literature obtained from the City, state/federal environmental agencies, or any other reputable educational resource center to all employees on a quarterly basis and provide copies to the City with the annual self-report. Literature topics must rotate on at least an annual basis.
d. All materials to be used in presentations must be reviewed/approved by the City before use in this program.

Nonresidential customers who wish to receive Fee Credit for educating the City regional customer base in the area of water quality awareness and protection must agree to meet the following minimum standards:

a. Disseminate stormwater and water quality-specific information obtained from the City, state/federal environmental agencies, or any other reputable educational resource center to customers on a quarterly basis using high traffic area kiosks, advertised special events, customer mailings, product label advertisements, public service announcements, ads, educational curricula, or other mass distribution techniques. Information topics must rotate on at least an annual basis. Copies of disseminated materials must be provided to the City along with estimates of the number of customers reached in each annual self-report.

b. All materials to be used in presentations must be reviewed/approved by the City before use in this program.

2.2.3.2 On-Site Refuse Control Program

In order to receive Credit for the On-Site Refuse Control Program, the following minimum criteria must be satisfied:

a. Identify or develop the organization's on-site refuse control plan and submit a copy to the City.
b. Initiate and maintain a solid waste recycling program that meets the City's minimum recycling requirements.
c. Keep refuse containers covered to eliminate exposure to wind, rain, and snow and where possible, place refuse containers in areas that do not drain to storm sewers.

2.2.3.3 On-Site Stormwater System Maintenance and Cleaning Program

In order to receive Credit for the On-Site Stormwater System Maintenance and Cleaning Program, a detailed management plan for maintaining on-site (nonpublic right-of-way) stormwater structures must be submitted along with documentation that the planned activities were completed. At a minimum, the management plan must address the following structures, where applicable:

a. Building rain gutters/downspouts – must be directed to vegetated areas wherever possible and cleaned at least annually.
b. Catch basins – must be cleaned of litter, debris, and sediment at least once per year.
c. Stormwater outfalls to private ditches, ravines, or creeks on private land must be cleaned at least once per year.
d. On-site drainage ditches or channels must be cleaned of any litter and debris and obstructive vegetation should be trimmed at least once per year.

2.2.3.4 Paved Area Sweeping Program

In order to receive Credit for the Paved Area Sweeping Program, the following minimum criteria must be satisfied:

a. Submit a detailed paved area sweeping plan to include definition of areas to be swept, frequency of sweeping (a minimum of twice per month), debris disposal method, and type of sweeper used.

b. Provide documentation of plan implementation, such as copies of paid invoices or employee timesheets, or a certification of work accomplished prepared and signed by an officer of the company.

2.2.3.5 Used Motor Oil Recycling Program

In order to receive Credit for the Used Motor Oil Recycling Program, the following minimum criteria must be satisfied:

a. Provide documentation to confirm disposal of used motor oil at used oil recycling sites (i.e., waste oil generated on-site by the property owner).

b. Display the City's current list of used oil recycling sites in clearly visible and publicly frequented locations.

2.2.3.6 Sanitary Sewer/Storm Sewer Cross-Connection Inventory Program

In order to receive Credit for the Sanitary Sewer/Storm Sewer Cross-Connection Inventory Program, the following minimum criteria must be satisfied:

a. Conduct a visual building and grounds survey to identify and inventory the locations of all sanitary and storm sewer connection points.
b. Provide building and site plans to the City that document the locations of all sanitary sewer and storm sewer connection points and sanitary and storm sewer line locations on a parcel of property.
c. If instances are found where sanitary sewage plumbing is connected to a storm sewer, the cross connection must be eliminated within thirty (30) days.
d. If any discharges are in question, the owner should contact the City to determine if elimination for the discharge is required.

2.2.3.7 Landscaping for Run-Off Rate Control and Water Quality Program

In order to receive Credit for the Landscaping and Run-Off Rate Control and Water Quality Program, the following minimum criteria must be satisfied:

a. Develop a landscape maintenance plan for properties with landscaped areas, utilizing lawn and garden practices that reduce stormwater run-off rates and protect water quality, including, but not limited to, the following recommended practices:

    i. Unless otherwise indicated by current soil tests, use phosphorus free fertilizer.
    ii. Apply all yard and garden chemicals sparingly, using the correct rates and recommended times, and not before a rainstorm.
    iii. Direct sprinklers to vegetated areas and not overlap onto impervious surfaces.
    iv. Where turf is considered necessary, maintain it by mowing grass to a height of 2-3". If necessary, seed in the spring and fall, and aerate and de-thatch in the fall. Leave grass clippings on the lawn as a natural fertilizer.
    v. Select hardy plants most suited to this climate and, where possible, reduce the amount of maintained turf and increase naturalized areas.
    vi. Mulch flowerbeds, shrubs and trees to retain water on-site.
    vii. Keep lawn and garden chemicals, garden debris, lawn clippings, and leaves off hard surfaces.

If appropriate to site conditions, the following practices are also recommended:

    viii. Landscapes should be designed to eliminate or at least minimize directly-connected impervious areas.
    ix. Maintain a 15' to 25' filter strip of tall grass or plantings along water bodies.
    x. Plant rain gardens in depressions that otherwise have standing water or to receive roof run-off.

b. Provide a copy of the landscape management plan to the City along with documentation of employee training for landscape management or landscape contracts that include the above provisions.

Nonresidential customers that provide services above and beyond the basic Landscape Program described above may be eligible for additional Credit. The City will evaluate requests for additional Credit on a case-by-case basis.

2.2.3.8 Storm Drain Stenciling Program

In order to receive Credit for the Storm Drain Stenciling Program, the following minimum criteria must be satisfied:

a. The City will provide the stencils with instructions to any owner/group interested in providing the labor.
b. Post decals or stencil all storm drain inlets with information identifying that it drains to a local water resource. For example, "drains to river" or "drains to creek".
c. Provide the City with number and location of storm drains on subject parcel.
d. Provide the City with plan for maintaining stencils/decals.

2.2.3.9 Designated Vehicle Washing Area

In order to receive Credit for the Designated Vehicle Washing Area, the following minimum criteria must be satisfied:

a. Provide area for vehicles to be washed away from stormwater drains and water resources.
b. Use environmentally sensitive cleaning materials.
c. Post location of vehicle washing area.
d. Provide the City with plan for location of vehicle washing area.

2.2.4 Option 2. School Education Credit

Those schools, public or private, wishing to receive Fee Credit for educating students and employees in the area of water quality awareness and protection must agree to the following minimum standards:

a. Devote two hours per half (four hours annually) to educating one grade level of students (or split between two grade levels) about water quality awareness and protection. Educational institutions will be required to submit programs or agendas to the City for environmental education sessions that will include information concerning number of attendees, time(s), place(s), and topic(s) covered during each session. The City will assist with providing materials for the education program. Pre- and post-session surveys are recommended. Topics must rotate on at least an annual basis, or become part of the curriculum for the same grade level each year.
b. Devote fifteen minutes per quarter (or an hour annually) to educating employees about water quality awareness and protection. Additionally, provide basic stormwater management information to new employees. Topics must rotate on at least an annual basis.

c. Post stormwater and water quality-specific educational information obtained from the City, state/federal environmental agencies, or from any other reputable educational resource center student and employee frequented areas. Information posted must be clearly visible. Topics must rotate on at least an annual basis. Provide copies of posted materials to the City.
d. Distribute stormwater and water quality-specific literature obtained from the City, state/federal environmental agencies, or any other reputable educational resource center to target students and all employees on an annual basis and provide copies to the City with the annual self-report. Topics must rotate on at least an annual basis.

Maximum credit for this category is 5%.

2.2.5 Option 3. Stormwater Quality Control Structural BMP Credit

BMPs identified in the BMP Manual will be eligible for a maximum Fee Credit of 20% if flows generated on-site are directed through the BMP in accordance with the Best Available Technology Standards defined in the Post Construction BMP Manual. This Credit will be based upon hydrologic data, water quality data, design specifications, and other pertinent data supplied by qualified, licensed professionals on behalf of property owners. Credits for on-site stormwater facilities shall be generally proportional to the benefit that such systems have on complementing or enhancing the water quality benefit to the City's stormwater management system. In order to receive Credit reduction as applied to the Fee calculation equation, property access, adequate and routine facility maintenance and self-reporting must be provided by the property owner to the City to verify that the BMP structure is providing its intended benefit. The actual percentage received will be determined through an evaluation of the system benefits provided at the time stormwater leaves the customer's property. BMPs may provide a single benefit or a combination of benefits, in which case credits will be additive.

The percentage of Credit will be calculated using the equation shown in the Credit application (see Appendix A), with a maximum Credit of 20%. In order to receive a credit, any or a combination of BMPs must be designed and maintained to achieve greater than 62% reduction in total suspended solids (TSS). The credit distribution is as follows:

60% TSS removal = 0% Credit

80% TSS removal = 10% Credit

100% TSS removal = 20% Credit

The customer will receive a 1 % credit for every 2% TSS removed above 60%. For example, if the sites BMP's are removing 67% of the TSS, then the customer would receive a 3% credit.

The customer must complete and submit data that quantifies and demonstrates the achievement of water quality goals. This documentation must be prepared by a qualified, licensed professional engineer and be accompanied by testing, modeling, design, and/or construction data that substantiates the percentage total suspended solids removal requirements obtained from the BMP Manual.

Structural BMPs that are eligible for credits are defined in the Post Construction BMP Manual. Prior to completion of the manual, the following structural BMP TSS Removal rates shall apply:

General Application BMPs	TSS Removal %
Wet Pond	80
Wet Extended Pond	80
Micropool Extended Detention Pond	80
Multiple Pond System	80
Dry Extended Detention Pond	60
Conventional Dry Detention Basins	10
Shallow Wetland	80
Extended Detention Shallow Wetland	80
Pond / Wetland System	80
Pocket Wetland	80
Bioretention Area	85
Sand Filters (Surface and Perimeter)	80
Infiltration Trench	90
WQ Dry Swales	90
Wet Swales	75
Filter Strip	50
Grass Channel	30
Gravity (oil-grit) Seperator	30
Modular Porous Paver Systems	-
Porous Pavement / Concrete	-
Organic Filter	80
Underground Sand Filter	80
Submerged Gravel Wetland	75
Alum Treatment System	90

Manufactured BMPs	10
Underground Detention	10
Other	Case-specific

Customers requesting a water quality credit must submit documentation that their facilities meet the design requirements outlined in the Post Construction BMP Manual current edition.

Nonresidential customers and private property POAs may receive credits for structural best management practices (BMPs) that provide stormwater quality enhancement. The City currently incurs operation and maintenance and capital costs associated with water quality components of the City's stormwater system. Nonresidential customers and private property POAs provide the City with cost savings by constructing new or retrofitting existing stormwater facilities to improve the quality of the City's receiving streams. Customers who apply for credits must provide as-built supporting documentation that their existing facilities are properly designed to provide pollution reduction.

2.2.6 Option 4. Stormwater Volume Control Credit

Stormwater volume control can be achieved by different methods. This Credit will be based upon hydrologic data, water quantity data, design specifications, and other pertinent data supplied by qualified, licensed professionals on behalf of property owners. Credits for on-site stormwater facilities shall be generally proportional to the benefit that such systems have on decreasing the water quantity that enter the City's stormwater management system. In order to receive Credit reduction as applied to the Fee calculation equation, property access, adequate and routine facility maintenance and self-reporting must be provided by the property owner to the City to verify that the BMP structure is providing its intended reduction. The actual percentage received will be determined through an evaluation of the system.

The total percentage of credit is dependent on the magnitude of stormwater quantity control provided by the on-site BMP's. A 5% credit will be allowed for each storm event where the post developed site quantity of run-off is equal to the pre-developed site quantity of run-off. The following storm events will qualify for a credit: 2, 5, 10, 25, 50 and 100 year storms. The pre-developed quantity calculation shall be based on a pre-existing condition of a pasture, grassland in good condition (CN range from 39 to 80) for previously developed properties.

The customer shall provide an as-built engineering report prepared by registered Professional Engineer (P.E.) that demonstrates the above quantity reduction. Failure to provide such information may result in the denial of the adjustment request.

The maximum credit allowable total credit for the stormwater volume will be 30%.

2.2.7 Fee Credit Calculations examples

Example 1

BMPs may provide a single benefit or a combination of benefits, in which case credits will be additive. The credit options have a maximum additive credit capacity of 50%. As an example of how a Fee Credit would be applied to a new request, imagine a parcel that receives the following Credits:

1.	Integrated Non-Structural BMP Credit	10%	(max 10%)
2.	Education Credit	0%	(max 5%)
3.	Stormwater Quality Control Structural BMP Credit	12%	(max 20%)
4.	Stormwater Volume Control Credit	20%	(max 30%)
	OPTIONS 1-4 CREDIT SUBMITAL	42%	(max 50%)

To determine the example Fee, assume the parcel has 30,500 square feet of impervious area. The baseline Fee calculation would be as follows:

$$\text{Fee} = \frac{(\text{impervious area in sq/ft.}) \times (\text{Rate})}{\text{SFU sq. ft.}}$$

$$\text{Fee} = \frac{(30{,}500)(\$3.00/\text{SFU/month})}{3{,}315 \text{ sq. ft. (SFU)}} = \$27.60/\text{month} \times 12 = \$331.22/\text{year}$$

Assuming documentation has been provided to prove that all the Program criteria described in the Manual have been and continue to be met. This example customer would receive a 42% Credit adjustment, changing the equation to:

$$\text{Fee} = \frac{(30{,}500)(\$3.00/\text{SFU/month})(1-0.42)}{3{,}315 \text{ sq. ft. (SFU)}} = \$16.01/\text{month} \times 12 = \$192.12/\text{year}$$

This is a savings of $139.10 per year, for each year the Program criteria are met.

Example 2

As an example of how a Fee Credit would be applied, a generic parcel that exists in Johnson City has been selected and contains the following characteristics:

Total Site Area (acres)	300.00
Impervious Developed Area (acres)	86.00
Pervious Developed Area (acres)	194.00
Total Wet Detention Basin Area (acres)	20.00
Total Required Wet Detention Area (acres) for 80% Reduction in TSS	20.00
Volume control for the 2, 5 & 10 year storms	

Option 3 Credits quality control –
From BMP Manual Calculations, Actual
Percent of TSS Removal for a wet pond
Would be 80 percent.
20 ac/20ac = 100% of removal rate
100% of the 80% removal = 80% removal
Therefore, Option 3 BMP credit would be
(80%-60%)/2 = 10.0% Credit

Option 4 Credits volume control –
Volume control for the 2, 5 & 10 year storms 15.0% credit
Therefore, Option 4 volume credit would be 15.0% Credit

1.	Integrated Non-Structural BMP Credit	0%	(max 10%)
2.	Education Credit	0%	(max 5%)
3.	Stormwater Quality Control Structural BMP Credit	10.0%	(max 20%)
4.	Stormwater Volume Control Credit	15.0%	(max 30%)
	OPTIONS 1-5 CREDIT SUBMITAL	25.0%	(max 50%)

To determine the example Fee, the parcel has 86 acres of impervious area. The baseline Fee calculation would be as follows:

$$\text{Fee} = \frac{(\text{impervious area in sq/ft.}) \times (\text{Rate})}{\text{SFU sq. ft.}}$$

$$\text{Fee} = \frac{86\text{ac}\ (43{,}560\ \text{sqft/ac})\ (\$3.00/\text{SFU/month})}{3{,}315\ \text{sq. ft. (SFU)}} = \$3{,}390.19/\text{month} \times 12 = \$40{,}682.28/\text{year}$$

Assuming documentation has been provided to prove that all the Program criteria described in the Manual have been and continue to be met, this example customer would receive a 25.0% Credit adjustment, changing the equation to:

$$\text{Fee} = \frac{86(43{,}560)(\$3.00/\text{SFU/year})(1-0.25)}{3{,}315\ \text{sq. ft. (SFU)}} = \$2{,}542.64/\text{month} \times 12 = \$30{,}511.68/\text{year}$$

This is a savings of $10,170.60 per year, for each year the Program criteria are met.

3.0 Application Procedures

A property owner seeking a Fee Credit must comply with the procedures outlined in this Manual and must submit a Fee Credit application (provided in Appendix A). All information necessary for the Stormwater Utility Manager to make a determination must be supplied as outlined in the Manual and the Credit application. Failure to comply with the procedures outlined in the Manual will result in a denial of the Credit application. In cases requiring a hydrologic analysis, a qualified professional engineer registered in the State of Tennessee must prepare and certify the documentation provided to verify the hydrologic benefit.

Existing facilities on or before the effective date of the stormwater utility fee will be evaluated based upon stormwater management program criteria existing at the time the facilities were constructed. New facilities that are placed in service after the effective date of the stormwater utility fee will be evaluated based upon stormwater management program criteria contained in the Stormwater Best Management Practice Manual, current edition. Existing facilities will be given partial credit predicated upon the water quality objective and water quantity criteria satisfied under those previously identified criteria. The Stormwater Utility Manager will assist the applicant in identifying the applicable criteria to be used for existing facilities.

4.0 Appeals

4.1 Process

Any person disagreeing with the interpretation or application of a provision in this manual, or the related laws or ordinances pertaining to Stormwater Management in Johnson City, may appeal in writing by using Stormwater Management Utility Form No. 5.

All appeals will be processed first through the Director of Public Works, for a recommendation, and then to the Johnson City, City Manager for final decision.

Any person still aggrieved may appeal the City Manager's decision to a court of competent jurisdiction.

5.0 Enforcement Policy

The City reserves the right to review the application for accuracy and/or inspect and review documentation confirming the provision of the BMPs at any time. If, after its review or inspection, the City finds the application to be inaccurate or the projected level of service is not being provided or continued, the customer will be notified in writing and given 45 days to correct the deficiency. The property owner must provide written documentation to the Stormwater Utility Manager within 45 days of the original notice that the BMP is being provided or continued as agreed in addition to such evidence as reasonably requires showing that the deficiency has been corrected. If, in the opinion of the Stormwater Utility Manager, the deficiency is not satisfactorily corrected, the Fee Credit attributable to the deficiency will be terminated on the following billing cycle and will remain in effect for a minimum of 3 months. Reapplication for Fee Credit will not be reviewed until the delinquent

BMP has been adequately reinstated for two continuous months and evidence of the corrections has been provided with the reapplication.

Annual self-reports will be required every January 1st to document service provision for the preceding calendar year. If the self-reports are incomplete or are not submitted to the City by the required date, the property shall be considered to be in non-compliance with the Credit Program requirements. Non-compliant properties will lose the Credit benefit and the Fee Credit suspension will remain in effect for a minimum of 3 months and will not be reinstated until the complete annual report is received with documentation that the program is being implemented as intended.

Once the Credit reduction has been canceled, a customer may not reapply for that particular Credit for a period of 3 months and then only if the deficiency has been corrected, as determined by the City inspection. It will be the responsibility of the customer to prove the stormwater management goals are met prior to the Credit being reissued.

All structural water quality control systems that are not listed in the BMP Manual may require, at the request of the City and at no cost to the City, periodic certified laboratory water quality sampling and reporting to insure that the water quality standards are being met.

APPENDIX A
ADJUSTMENT FORMS
CREDIT APPLICATION FORMS
ENFORCEMENT/APPEAL FORMS

JOHNSON CITY, TENNESSEE
STORMWATER MANAGEMENT UTILITY FORM NO. 1
RESIDENTIAL SFU ADJUSTMENT

DATE:

PROPERTY ADDRESS:

PARCEL I.D. #:

UTILITY ACCOUNT #:

TYPE OF RESIDENTIAL UNIT CURRENTLY (CHECK APPROPRIATE BOX):

☐ **Small Single Family - 0.51 SFU** ☐ **Average - 1.0 SFU** ☐ **Large - 1.68 SFUs**

☐ **Multi-Family - 0.71 SFU/Unit**

REASON FOR SFU ADJUSTMENT:

☐ Any Residential Dwelling Unit being billed incorrect SFUs. (Please give explanation below)

☐ Multi-family complex is being billed more SFUs than the number of units times the SFU factor (0.71).

Number of SFUs being billed: _____
Number of Units in complex: _____

☐ Multi-Family request to be considered nonresidential (must have survey attached)

Impervious area: _____ divided by Average SFU (3,315 sq.ft.) =
Proposed # of SFUs: _____ Current number of SFUs being billed _____

☐ Other, explain

APPLICANT'S SIGNATURE:

APPLICATION REVIEWED BY: office use only

APPLICATION APPROVED: ☐ Yes ☐ No

COMMENTS:

_____

_____

JOHNSON CITY, TENNESSEE
STORMWATER MANAGEMENT UTILITY FORM NO. 2
NON-RESIDENTIAL SFU ADJUSTMENT

DATE:

PROPERTY ADDRESS:

PARCEL I.D. #:
UTILITY ACCOUNT #

TYPE OF DEVELOPMENT:

PARCEL IMPERVIOUS AREA (square feet):

Billed Number of SFUs:

REASON FOR SFU ADJUSTMENT:

☐ CONDITION 1
Incorrect amount of impervious area

☐ CONDITION 2
Gravel areas not used for regular vehicular traffic (ingress/egress, material storage or parking) calculated as impervious area on utility bill

☐ Other, explain:

_____

_____

If Condition 1 is checked, complete the following:	If Condition 2 is checked, complete the following:
Property Impervious Area _____ (sq ft)	Non-vehicular Gravel Area _____ (sq ft)
Revised Number of SFUS[1] _____	Revised Number of SFUS[2] _____

APPLICANT'S SIGNATURE: office use only

APPLICATION REVIEWED BY: DATE:

APPLICATION APPROVED: ☐ Yes ☐ No

CONDITIONS OF APPROVAL OR REASON FOR DENIAL AND COMMENTS:

[1] Revised number of SFUs = Property's impervious area (sq.ft.) divided by 3,315 sq.ft.
[2] Revised number of SFUs = Billed number of SFUs – [(Non-vehicular gravel area (sq. ft.) divided by 3,315 sq.ft.)]

Johnson City Stormwater Management Department

Stormwater Credit Application

(Please Type or Print)

Check One:

□ **This is the first application for Credit for this property.**
□ **This is a reapplication for renewed Credit after a Credit suspension.**

If this is a first application, please address all questions and provide documentation that BMPs will be in place within 60 days of submitting this application. Existing BMPs will require proof of implementation, while new BMPs will require the submittal of implementation plans.

If this is a reapplication for renewed Credit after a Credit suspension, please complete Part I and provide all Options listed in Part II that were suspended. Evidence that the deficiency resulting in the Credit suspension was corrected for *at least three months prior to reapplication* must be attached to the reapplication.

PART I. GENERAL INFORMATION

1. Customer Contact Information: Date: _____

   Name/Title _____

   Company _____

   Address _____

   Phone _____ E-mail _____
2. Property Parcel ID #(s): _____
3. Utility Account #(s): _____
4. Property Address/Description: _____
5. Authorized Representative (if applicable) Contact Information:

   Name/Title _____

   Address _____

   Phone _____ E-mail _____

NOTE: Please provide specific responses to the following questions, using additional pages if necessary, to provide a complete and comprehensive application.

PART II. INDIVIDUAL CREDIT OPPORTUNITIES

Option 1. Integrated Non-Structural BMP Program Credit

Please refer to Section 2.2.3 in the Credit Manual and provide the necessary background information and documentation to prove that the following programs are in place and functioning on a continuing basis. Documentation may include such things as contracts, invoices, operating procedures, plans, maps, etc. All of the following criteria for all of the 9 BMP options must be met to receive the 10% Fee Credit for this category. If any of the criteria listed below do not pertain to your non-residential property, please write "does not apply" followed by a description explaining the exception. If a representative other than the one identified under Part I is overseeing this component of the credit program, please provide the following information:

Name/Title, Address, Phone #, and e-mail address of the person responsible for coordinating non-structural BMPs, along with the time of day the person may be reached:

_____
_____
_____
_____

(BMP 1) Educational Program

1. Describe the audience(s) that will receive the water quality information and how the information will be selected and disseminated.

2. Describe where stormwater and water quality-specific educational information will be posted (provide picture if possible).

(BMP 2) On-Site Refuse Control Program

1. Identify where solid waste disposal and recycling information will be posted.

2. Describe your on-site recycling program (number of collection site, types and volumes of materials recycled each year, collection frequency, recycling destination, etc.)

3. Describe how outdoor solid waste and recycling containers are protected from exposure to wind, rain, and snow and connection to storm sewers.

4. Describe your refuse control plan.

(BMP 3) On-Site Stormwater System Maintenance and Cleaning Program

1. Using a site plan, identify the locations of stormwater management structures located on the property, but not in the public right-of-way.

2. Define the maintenance and cleaning schedule for each of the on-site stormwater structures:

   - Rain gutters:

   - Catch basins:

   - Curbs and gutters:

   - Outfalls:

   - Other structures (describe):

(BMP 4) Paved Area Sweeping Program

1. Provide a site plan that identifies the paved area being swept, define the frequency (days and times) of paved area sweeping, and describe the type of equipment used to complete the sweeping.

2. If using a contracted firm to conduct sweeping, please indicate the contract information (company name, address, contact person, telephone number, contract number, contract length, and contract expiration date).

(BMP 5) Used Motor Oil Recycling Program

1. Is used motor oil reprocessed on-site? Yes [ ] No [ ]

2. If it is not reprocessed on-site, identify the name of the company that collects and/or recycles your used motor oil. (Provide company name, address, contact person, telephone number, contract number, contract length, and contract expiration date.)

3. Indicate the amount of used motor oil collected on-site each month.

4. Indicate where Johnson City's current list of used oil recycling sites will be displayed.

(BMP 6) Sanitary Sewer/Storm Sewer Cross-Connection Inventory Program

1. Using a site plan, identify the locations of all sanitary and storm sewer connection points and sanitary and storm sewer line locations on the property.

2. If instances are found where sanitary sewage plumbing is connected to a storm sewer, identify what steps were taken to eliminate the cross connection and the date the work was completed.

(BMP 7) Landscaping for Run-Off Rate Control and Water Quality

1. Provide a copy of a landscape maintenance plan that identifies what lawn and garden practices are utilized to reduce stormwater run-off rates and protect water quality, using the practices recommended in the Credit Manual as a baseline.

2. Describe the employee landscape management training plan or provide contract and contact information for firms contracted to complete landscape maintenance using the provisions in the landscape maintenance plan.

(BMP 8) Storm Drain Stenciling Program

1. Provide a copy of the decal or stencil that will be used to mark storm drains.

2. Provide a plan showing location and number of storm drains to be labeled.

3. Provide a copy of storm drain stencil maintenance plan that identifies annual inspections and maintenance for decals/stencils.

(BMP 9) Designated Vehicle Washing Area

1. Provide a plan showing the location of the proposed vehicle washing area. Plan must indicate site topography and show any existing storm drains and water courses.

BMP Selected:

BMP	Description	YES	NO
1	Educational Program		
2	On-Site Refuse Control Program		
3	On-Site Stormwater System Maintenance and Cleaning Program		
4	Paved Area Sweeping Program		
5	Used Motor Oil Recycling Program		
6	Sanitary Sewer/Storm Sewer Cross-Connection Inventory Program		
7	Landscaping for Run-Off Rate Control and Water Quality Program		
8	Storm Drain Stenciling Program		
9	Designated Vehicle Washing Area		

Note: All BMPs must be implemented to be eligible for Credit.

For Office Use Only

Option 1. Integrated Non-Structural BMP Program Credit Awarded

_____%
(10%max)

_____
(date)

_____
(initials)

Option 2. Education Credit

1. Provide copies of programs or agendas for environmental education sessions. Include information on the number of attendees, time(s), place(s), and topics covered during each session.

2. Provide planned questions for pre- and post-education surveys.

3. Provide copies of educational materials used for employees on water quality awareness and protection.

4. Provide copies of water quality-specific educational materials that will be posted. Indicate where the material will be posted.

For Office Use Only

Option 2. Education Credit Awarded

_____%
(5% max)

_____
(date)

_____
(initials)

Option 3. Stormwater Quality Control Structural BMP Credit Computation

1. Please attach the following items to show that the property meets the Fee Credit criteria. If applying for Credit for multiple BMPs, please attach additional required sheets.

   - Site Plan(s) showing:
     - Property location with parcel boundaries
     - Impervious areas (IA)
     - Description and location of BMP(s)
     - Topography and drainage boundaries for BMPs and their associated % discharges
     - BMP as-built plan
     - Drainage discharge locations to off-site properties (natural and constructed)

   - BMP plans and design calculations
     - Total Site Area = _____ acres, (impervious and pervious areas)
     - Drainage Area (DA) to BMP = _____ acres
     - Estimates of percent Total Suspended Solids Removal pursuant to City BMP Manual for the BMP(s), accompanied by testing, modeling, design, and/or construction data supporting the estimates

2. For the flow generated on-site that is routed through this BMP, calculate the Credit using the following equation:

   Credit = (% Actual TSS Removal minus(-) 60%) /2 (to a maximum of 20%)

   Example = If actual TSS Removal is 88%, then the credit is (88%-60%)/2 = 14%

For Office Use Only

Option 3. Stormwater Quality Control Credit Structural BMP Awarded

_____%
(20% max)

_____
(date)

_____
(initials)

Option 4. Stormwater Volume Control Credit Computation

1. Please attach the following items to show that the property meets the Fee Credit criteria. If applying for Credit for multiple BMPs, please attach additional required sheets.

   - Site Plan(s) showing:
     - Property location with parcel boundaries
     - Impervious areas (IA)
     - Description and location of BMP(s)
     - Topography and drainage boundaries for BMPs or open spaces and their associated percentage discharges
     - BMP as-built plan
     - Drainage discharge locations to off-site properties (natural and constructed)

   - BMP plans and design calculations
     - Total Site Area = _____ acres
     - Drainage Area (DA) to BMP = _____ acres
     - Pre-developed volume per storm event
     - Post-developed volume per storm event

2.

A. Structural BMPs

i.) Summarize the key points of the site sensitivity analysis to describe potential down gradient impacts to surface or ground water from drainage captured on-site.

ii.**)** Calculate credit: **=** Circle storms that post developed volume out = pre-developed volume out (attach calculations that confirm findings):

2 5 10 25 50 100

Volume Credit = (# of storms that qualify for credit) x 5% = total volume credit

=_____%
(30% max)

For Office Use Only

Option 5. Stormwater Volume Control Credit Awarded

Structural Credit and/or Preservation Credit = _____%
(30% max)

_____
(date)

_____
(initials)

The application packet should consist of the completed application form and a copy of all necessary documentation, including the applicable site plans and calculations that will allow for a complete review of the site and existing stormwater management BMPs. Incomplete applications will not be processed.

Submit the application, plans, and calculations to:

Johnson City Stormwater Management Department
P.O. Box 2150
209 Water Street
Johnson City, TN 37605

ATTN: Andrew Best, P.E.

_____

Signature of Owner **Date**

_____ _____

Signature of Licensed Professional Engineer Providing Hydrologic Evaluation **Date**

_____ _____

Summary Credit Calculation **FOR OFFICE USE ONLY**

OPTIONS 1-4 (WITH MAXIMUM ADDITIVE CREDIT CAPACITY = 50%)

1. Integrated Non-Structural BMP Credit _____ (max 10%)
2. School Education Credit _____ (max 5%)
3. Stormwater Quality Control Structural BMP Credit _____ (max 20%)
4. Stormwater Volume Control Credit _____ (max 30%)

OPTIONS 1-6 CREDIT TOTAL _____ (max 50%)

Fee Credit Adjustment Factor = 1 - (% credit/100) = _____

NOTE: The minimum per parcel Fee = 1 SFU

_____
(date)

_____
(initials)

JOHNSON CITY, TENNESSEE
STORMWATER MANAGEMENT UTILITY FORM NO. 3
NOTICE OF VIOLATION

TO: _____

ADDRESS: _____

_____

_____

DATE: _____

Johnson City has found that the condition(s) marked below,

- ☐ Drainage facility or its construction is contrary to, or in violation of, approved plans.
- ☐ Drainage facility or plans are unacceptable.
- ☐ Drainage facility presents an unsafe or dangerous condition.

Exists at the following location:

_____

_____

_____

The work which does not conform to City law, regulation, policy or approved plans is:

_____

_____

_____

This work must be corrected to conform to City law, regulation, policy or approved plans within _____ days of receipt of this notice, or all work at the above location will be stopped by the City. The person who may be contacted (between the hours of 8 a.m. and 4:30 p.m.) at Johnson City regarding this notice is

Mr. Phil Pindzola
Director of Public Works

JOHNSON CITY, TENNESSEE
STORMWATER MANAGEMENT UTILITY FORM NO. 4
CESSATION OF WORK NOTICE

TO: _____

ADDRESS: _____

_____

_____

DATE: _____

Johnson City issued a Notice of Violation to you on _____ which stated that drainage facility related work did not conform with City law, regulation, policy or approved plans and that the related work must be corrected within _____ days. The work stated in the Notice of Violation has not been corrected to date and hence the City is ordering all work to cease at the location given below:

Location where work is to cease:

_____

_____

_____

_____

The person who may be contacted (between the hours of 8 a.m. and 4:30 p.m.) at Johnson City regarding this notice is

Mr. Phil Pindzola
Director of Public Works
Johnson City
(___) ___-____

JOHNSON CITY, TENNESSEE
STORMWATER MANAGEMENT UTILITY FORM NO. 5
PETITION TO APPEAL

DATE: _____

COMPLAINANT: _____

COMPLAINANT'S ADDRESS: _____

_____

PARCEL I.D. NUMBER: _____

UTILITY ACCOUNT NUMBER: _____

PARCEL'S ADDRESS: _____

_____

TYPE OF DEVELOPMENT (Check one) □ Residential □ Non-residential

Reason for Appeal (State where a City ruling, interpretation, or order is erroneous and attach a copy of said ruling, interpretation or order from the City, or specify City provision or applicable City Code exemption):

_____

_____

_____

_____

The Appeal has been reviewed by the Public Works Director on _____ 20___. On this date, The Public Works Director

□ approved □ denied the requested appeal. Comments or conditions:

_____

_____

_____